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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/625,769	07/26/2000	Chiyoaki Iijima	9319S-000142	7886

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EXAMINER
SCHECHTER, ANDREW M

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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.

EXAMINER	
ART UNIT	PAPER
	17

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Commissioner for Patents

Enclosed please find copies of the Information Disclosure Statements filed on 23 January 2003 and 2 April 2003, Paper Nos. 12 and 15.

ROBERT H. KIM
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Andrew Schechter
10 July 2003

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 18

Application Number: 09/625,769
Filing Date: July 26, 2000
Appellant(s): IIJIMA, CHIYOAKI

G. Gregory Schivley
Reg. No. 27,382
Bryant E. Wade
Reg. No. 40,344
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 30 May 2003.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences (there being none) which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

No amendment after final has been filed.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

The rejection of claims 16 and 19-24 stand or fall together as stated by the appellant.

The rejection of claims 17 and 18 stand or fall with the base claim 16 as stated by the appellant.

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

5,686,979	WEBER ET AL.	11-1997
5,828,488	OUDERKIRK ET AL.	10-1998
6,359,670	BROER ET AL.	3-2002

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 16 and 19-24 stand rejected under 35 U.S.C. 103(a). This rejection is set forth in prior Office Action, Paper No. 11, and is copied here verbatim:

> Claims 16 and 19-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Weber* in view of *Ouderkirk,* and further in view of *Broer et al.,* U.S. Patent No. 6,359,670.
>
> *Weber* discloses [see Fig. 9] a transflective LCD (both reflection type and transmission type), comprising a liquid crystal panel [142] and an illuminating device [132], where the illuminating device has a light guiding member [col. 11, lines 63]. The device also comprises a light diffuser [134], arranged between the liquid crystal display and the backlight (which can contain a reflector, as will be discussed in a moment). There are at least two substrates [150 and 152] between the diffuser and the reflector, to say nothing of the thickness of the light guide itself, so d will be greater than 0.7 mm and the recited haze inequality is automatically satisfied (the haze is always greater than or equal to zero or any negative number).
>
> Weber does not explicitly disclose that the diffuser has "forward scattering characteristics". *Ouderkirk* teaches using a diffuser "with a high degree of forward scattering" in an analogous context [col. 3, lines 12-15, and it would be

obvious to one of ordinary skill in the art to do so in the device of *Weber*, motivated among other reasons by *Ouderkirk's* teaching that this is equivalent to low reflectivity, so the light will be efficiently utilized.

Weber discloses an illuminating device [132] and suggests a variety of possibilities [col. 11, lines 61-64] but without explicit details, particularly that there is a reflector present. The examiner takes official notice that it would be obvious to one of ordinary skill in the art to use a conventional backlight structure as shown in Fig. 1 of *Broer*, which has a light source [10] introducing light into a light guiding member which has a light reflector [11] on its bottom surface. (This structure is well-known and has advantages such as being thin and having efficient use of light due to the reflector.) When the device is in transflective mode, therefore, this element [11] acts as the light reflector of claim 16. Claim 16 is therefore unpatentable.

There is a light source [10] in *Broer* to introduce light to the light guiding member, and the illuminating device is between the light diffuser and the light reflector, so claims 20 and 21 are also unpatentable. There is a polarizer [138] on the front side of the liquid crystal display in *Weber*, and an absorbing polarizer [140] between the liquid crystal panel and the light reflector, so claims 23 and 19 are also unpatentable. There is reflective polarizer [144] between the polarizer [140] and the reflector, with the transmission axes coinciding, so claims 22 and 24 are also unpatentable.

Claims 17 and 18 stand rejected under 35 U.S.C. 103(a). This rejection is set forth in prior Office Action, Paper No. 11, and is copied here verbatim:

Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Weber* in view of *Ouderkirk* and *Broer* as applied to claim 16 above.

Weber does not disclose color filters in its liquid crystal panel [142]. However, the examiner takes official notice that such (red, green, and blue) color

filters are well-known and conventional and it would be obvious to one of ordinary skill in the art to include them, motivated by the desire to create a color display. Claims 17 and 18 are therefore unpatentable.

(11) Response to Argument

The sole issue raised by the appellant is that no prior art teaches or suggests the discovered inequality $H \geq -200d + 140$ (mm), which is the claimed relationship of haze value (H) to distance (d) in claim 16. The appellant asserts that "[d]iscovering the relationship of haze value to distance is sufficient" for patentability [p. 10 of Appellant's Brief].

The examiner agrees that no prior art teaches or suggests the discovered inequality. However, the prior art does teach and/or suggest a device whose haze value (H) and distance (d) satisfy the inequality. This is not disputed by the appellant. The examiner asserts that this is sufficient for the claim to be held unpatentable.

The recited inequality sets a claimed range of values for the haze value (H) and the distance (d). According to MPEP 2131.03,

> "[W]hen, as by a recitation of ranges or otherwise, a claim covers several compositions, the claim is 'anticipated' if *one* of them is in the prior art." *Titanium Metals Corp. v. Banner,* 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) (citing *In re Petering,* 301 F.2d 676, 682,133 USPQ 275, 280 (CCPA 1962).

In this case, claim 16 covers a range of devices by recitation of an inequality, and one of them is a device in the prior art, so the claim is unpatentable. The "discovery" of the particular range defined by the inequality is not sufficient for patentability.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Andrew Schechter
July 11, 2003

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